

DEDICATED  
TO SCIENTIFIC  
RESEARCH AND  
EDUCATION,  
INSPIRING  
RESPECT FOR  
THE NATURAL  
WORLD

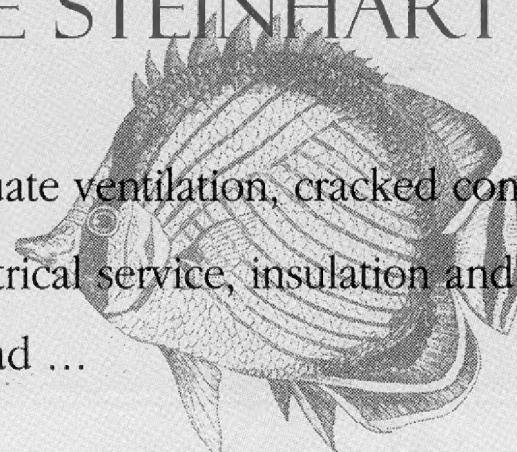


# ACADEMY

## *Newsletter*

### SAVE STEINHART AQUARIUM

**L**eaking roofs, rusting pipes, inadequate ventilation, cracked concrete walls, settling floors, outdated electrical service, insulation and floors containing asbestos, paint containing lead ...



These are some of the serious structural problems challenging the operation of the Steinhart Aquarium. Years of saltwater corrosion have resulted in spiraling deterioration and damage. Without immediate repair the aquarium will continue to decline — eventually becoming too unsafe to operate and too expensive to renovate. Additionally, a major earthquake could destroy every fish and animal loved so much by all their visitors.

Due to the substantial deterioration of the life-safety structures of the aquarium — and the potentially dangerous conditions in the event of another earthquake — the S.F. Board of Supervisors has unanimously agreed that a \$29 million general obligation bond should be placed on the November ballot. The bond will enable voters to approve the funds necessary to: provide seismic upgrades; remove asbestos, lead paint and other toxins; re-



place the life support system; and improve disabled access to Steinhart.

The Academy's board of trustees also has committed to making improvements to the design and displays that will allow new technologies to be used without compromising the essence of the aquarium.

During the fall, a cadre of volunteers and staff will explain to San Francisco citizens the importance of our aquarium to the education and enjoyment of visitors, to the preservation of endangered species and to the scientific mission of the Academy. If you would like to help us in our efforts in any way — be it contributions of time or energy, or displaying a poster in your home or office — please call (415) 351-1995, and "Save Steinhart Aquarium."

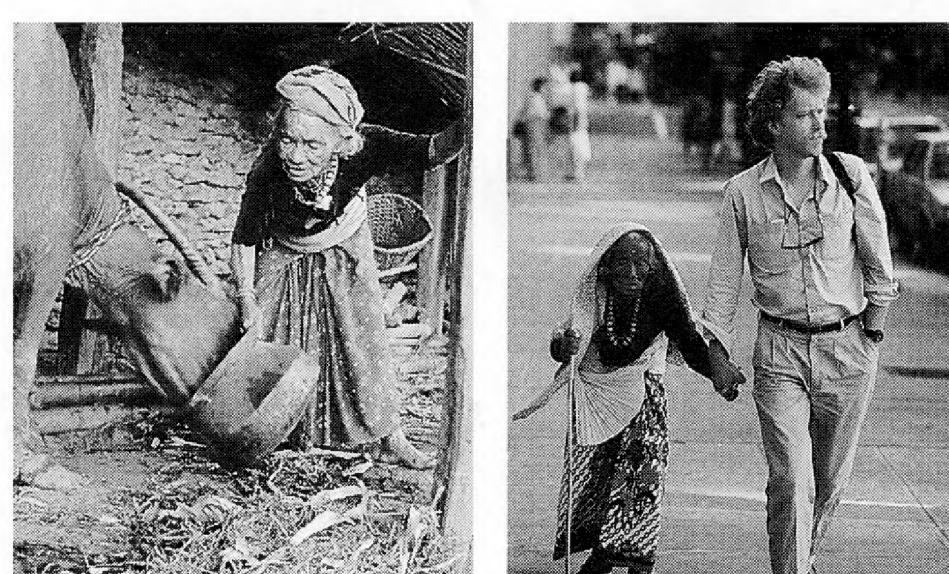


STEINHART'S DIRECTOR  
BOB JENKINS POINTS OUT  
STRUCTURAL PROBLEMS  
BEHIND THE SCENES.

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#### SEPTEMBER MEMBERS MEETING

## AAMA



### FROM NEPAL TO AMERICA

With author Broughton Coburn

Sept. 13, 2 p.m. & 7:30 p.m.

Journey with Aama, a Nepali woman, from her village in the foothills of the Himalayas on a 12,000-mile odyssey to the United States. Author Broughton Coburn's slide-illustrated presentation begins in Aama's village in Nepal, where we are immersed in the cosmology, philosophy, hopes and humor of a woman who had virtually no exposure to Western culture. In 1988 she turned 84, a watershed year sanctified by a long-life ritual that relieves elders from further worldly obligations — an auspicious time to go on a pilgrimage. That's when she came to America with Coburn and his wife to search for the soul of our country.

Aama visits cities, advises farmers, kisses a killer whale, bathes ritually in the ocean, rejoices at Disneyland, gambles in Las Vegas, meets with Native Americans, finds kin among the Hutterites and prays at Old Faithful. Aama's reactions to the

United States are amusing, surprising and sometimes disconcerting, yet we unexpectedly find that her emotions and sensibilities are not unlike our own. Aama is a universal spirit, and she has found the sacredness that surrounds us and breathes within us.

Coburn lived and worked in Nepal for more than 15 years and formed a special bond with Aama, who was his landlady for two of those years. He is the author of two nonfiction books, *Aama in America: A Pilgrimage of the Heart* and *Nepali Aama: Life Lessons of a Himalayan Woman*. A book-signing will follow the lecture in the Academy Bookstore.

Please present your membership card at the Academy's entrance and again at the auditorium. This members meeting is provided as a benefit of membership and thus is only open to members of the Academy.



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## works: rg Syndrome

ed as a delicately balanced system of organisms. But the fossil record shows that animals evolve in fits and starts at slow rates and hardly ever reach perfection. Renowned paleontologist Stephen Jay Gould explains how Darwinian processes work by using the example of Goldberg solutions.

(He depicted counterintuitive and sometimes absurd solutions used to complete simple tasks.) As an entertaining lecturer, Bakker is the author of *The Dinosaur Heresies*, *The Dinosaurs: The Evidence, Nature, Scientific American*, and *Audubon*. A book-signing

m.  
members

information, please call 750-7128.

RAVEL

## Darwin: Patagonia to Peru

cruise aboard the *M.S. Alla Tarasova* to explore the incredible diversity of Chile and Peru. As your guide, shore excursions will take you to the Valley of the Moon, the 12th century adobe Pukará of Lasana, San Pedro de Atacama, and for its collection of well-preserved mummies. And Chan Chan (home of the world's largest adobe city). All aircraft for a flight over the famous Colca Canyon. Trip to the fabled city of Machu Picchu. (double occupancy), including international airfare (double occupancy), no airfare

## Available

excursions: Yucatán, Land of the Incas, and Chuck Cecil, Jan. 6-20; and Voyage to the M.V. Sea Bird with Jim Kelley,

information on these and other excursions is available at the travel office at 750-7348.

has given memberships to friends and family — including her husband and son. Many years ago, she made her first gift to the Academy's Pooled Income Fund gift and later added another contribution. She has discovered that a pooled fund provides many benefits, including a charitable tax deduction, relief from capital gains tax, and reliable quarterly income. The Pooled Fund also provides an important future for the Academy.

Each participant in the Academy's Pooled Income Fund will receive a quarterly check. Why not join them in giving? If you are at least 55 years of age and would like information on the benefits of the Academy's Pooled Income Fund, please call 750-7128 or use the response form on our newsletter.



### Remembering Mrs. Marriner (Sallie) Eccles, Academy Benefactor 1908-1995

The Academy recently lost a dear friend with the passing of Mrs. Marriner (Sallie) Eccles. Raised in Long Island, N.Y., she spent most of her life in Salt Lake City, Washington, D.C. and San Francisco, generously sharing her boundless energy, invaluable advice, financial generosity and love for life on Earth. She provided numerous

gifts and grants to the Academy and other Bay Area institutions to ensure that the arts and sciences would be made available to everyone.

Eccles, who began supporting the Academy in 1977, directed much of her philanthropic effort toward the aquarium, remarking once that "the aquarium makes me believe in God." She conceived of and supported evening hours on "Free Wednesdays" at the Academy to allow people who work during the day a chance to enjoy the museum. Ranking high among Eccles' lifetime of accolades was having one of Steinhart's black-footed penguins named "Sallie" after her. The lives of those who knew her, and all the animals and visitors to the Museum that did not, are richer because of her.



MRS. ECCLES SPEAKS WITH MAYOR FRANK JORDAN AT THIS YEAR'S ACADEMY BALL.

MORRISON PLANETARIUM

## Knock, Knock...

**Feature Sky Show:** Who's out there? Take a look at the search for extraterrestrial life, from NASA's defunct Project SETI (now revived and renamed Project Phoenix) and Berkeley's Project Serendip to earlier attempts to listen for signs of alien civilizations. Did you know that radio pioneer Guglielmo Marconi once listened for messages from Mars or that Nikola Tesla believed that he had been contacted by another world? Despite its public appeal, why don't many scientists take the subject of UFOs seriously? Find out where we stand in the search for aliens. The show opens Sept. 15 and is shown daily at 2 p.m. and at 4 p.m. on weekends and holidays (closes Jan. 7.).

## Sky Shows Delight Visitors

**Current Sky Shows:** As of June 30, 86,571 visitors have seen a planetarium sky show this year.

The planetarium will be CLOSED for sky show changes Sept. 11-14 and will reopen with "Knock, Knock..." on Sept. 15. The additional weekday sky shows that were added for summer will end after Labor Day at which point there will only be a 2 p.m. show Monday through Friday.

### September Schedule

The planetarium is closed Sept. 11-14

Sky Show/Description	Wkday	Wkend
<b>Knock, Knock...</b> search for extraterrestrial life (opens Sept. 15)	2 p.m.	2 & 4 p.m.
<b>Encounter With a Giant</b> the solar system's largest planets	2 p.m.	2 & 4 p.m.
times through Sept. 10 times starting Sept. 15	—	1 & 3 p.m.
<b>Realm of the Galaxies</b> the secrets they hold (closes Sept. 10)	—	1 & 3 p.m.
<b>Where in Space is Carmen Sandiego?</b> a family show	—	11 a.m.
<b>StarTalk</b> tour of the night sky	—	noon

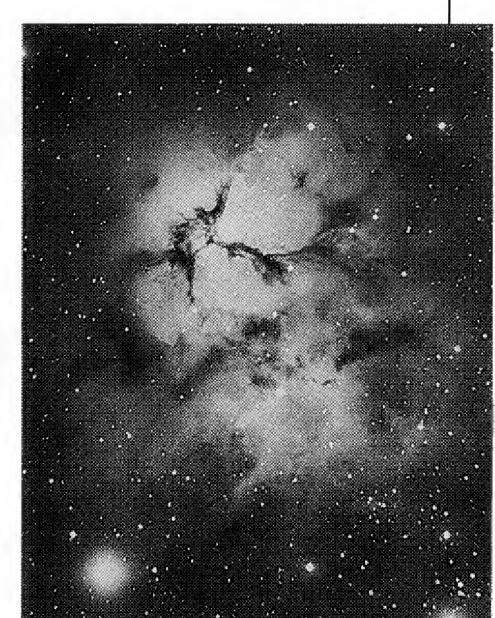
For more information, please call 750-7141.

## Stellar Alchemy: The Origin of Chemical Elements

**B. Dean Lecture:** Once nuclear reactions were produced in the laboratory, their role in stellar energy generation became apparent. However, it has only been within the last 10 years that astronomical observations have provided confirmation of the theoretical ideas developed in the 1930s and 1950s.

Dr. Eric Norman, senior scientist at the nuclear science division of the Lawrence Berkeley Laboratory, studies the center of stars from a mile underground. Norman will describe the sequences of nuclear reactions believed to be responsible for power generation within stars. The evolution and final fates of stars will be discussed, along with the key astronomical observations that support these models.

Tue., Sept. 26 — 7:30 p.m.  
Tickets, \$3 each



Mt. Wilson Observatory

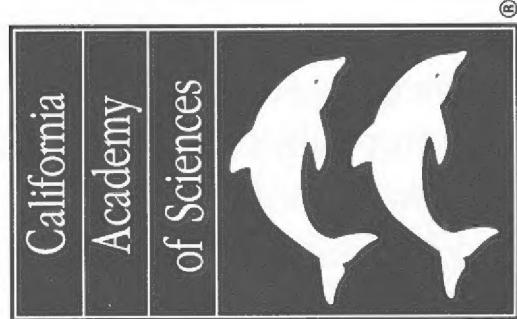
The Fall '95 series will continue with Dr. Ed Smith, Jet Propulsion Laboratories, Oct. 31; Dr. Bernard Sadoulet, U.C. Berkeley Center for Particle Physics, Nov. 21; and Dr. Leslie Young, NASA-Ames, Dec. 12.

For advance tickets, use order form. Tickets may be available at the door on a standby basis. Please call 750-7141, for more information.

**ORDER FORM**

California Academy of Sciences  
Golden Gate Park  
San Francisco, CA 94118

Address Correction Requested



The Academy includes the Natural History Museum, Steinhart Aquarium and Morrison Planetarium. Open every day from 10 a.m. to 5 p.m. July 4-Labor Day we're open 9 a.m. to 6 p.m.

**VISITOR SERVICES**

Academy Information: 415-750-7145  
Academy Store: 750-7410  
Admissions: 750-7159  
Aquarium: 750-7247  
Biodiversity Center: 750-7361  
Development Office: 750-7216  
Docent Tours: 750-7155  
Education Office: 750-7100  
Group Information: 750-7159  
Job Hotline: 750-7333  
Laserium: 750-7138  
Lectures: 750-7128  
Library: 750-7102  
Membership Office: 750-7111  
Planetarium: 750-7141  
Planned Giving: 750-7216  
Security: 750-7000  
Switchboard: 221-5100  
Travel: 750-7348  
Volunteer Services: 750-7154  
Weekend Information: 750-7375

**PLANETARIUM'S B. DEAN LECTURE SERIES**

Quantity	Total
<input type="text"/> x \$6	<input type="text"/>
<input type="text"/> x \$30	<input type="text"/>
<input type="text"/> x \$3	<input type="text"/>
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<input type="text"/> x \$3	<input type="text"/>
<b>TOTAL \$</b>	<input type="text"/>

**ANCESTRAL PASSIONS:**  
The Leakey Family / Sept. 14  
(Lecture only)  
(Reception only)

**HOW EVOLUTION WORKS: THE RUBE GOLDBERG SYNDROME** / Sept. 19

**TOTAL \$**

**STELLAR ALCHEMY: THE ORIGIN OF CHEMICAL ELEMENTS** / Sept. 26

Dr. Ed Smith / Oct. 31  
Dr. Bernard Sadoulet / Nov. 21  
Dr. Leslie Young / Dec. 12

**TOTAL \$**

**POOLED INCOME FUND**

Please send me information about the Academy's Pooled Income Fund.

**TOTAL PAYMENT ENCLOSED**

\$

**PAYMENT METHOD**

American Express

MasterCard

VISA

Check

Credit card charges gladly accepted over \$10.

Exp. Date \_\_\_\_\_

Card# \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

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**THE  
ACADEMY  
STORE**

Just in time for "back to school," the Academy's own signature totebag featuring graphic animals inspired by ancient cave paintings. This generous 14-by-19 inch totebag is printed on both sides and is machine washable, for only \$12.95.



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**SEPTEMBER**

**SUNDAY**

**MONDAY**

**TUESDAY**

**WEDNESDAY**

**THURSDAY**

**FRIDAY**

**SATURDAY**

**PERMANENT EXHIBITS**

**PENGUIN ENVIRONMENT**: A breeding colony of 18 black footed penguins waddles and swims in this crowd pleasing display in the aquarium. (See daily feeding times.)

**3 PENGUIN FEEDINGS**  
are at 11:30 a.m. and 4 p.m. every day

**10** "Realm of the Galaxies" sky show closes

**17 PLANETARIUM SKY SHOWS**  
on weekends at 11 a.m., and at noon, 1, 2, 3 and 4 p.m.

**24**

**4** Holiday sky show schedule in effect for Labor Day  
"Buccellati: Artistry in Gemstones & Gold" exhibit closes

**11** Planetarium closed through the 14th for sky show change

**18 PLANETARIUM SKY SHOWS**  
on weekdays at 2 p.m.

**25**

**5** Return to non-summer hours; the Academy's open 10 a.m. to 5 p.m.

**12**

**19 HOW EVOLUTION WORKS: THE RUBE GOLDBERG SYNDROME**, 7:30 p.m. (Special Lectures)

**26**

**26 Stellar Alchemy: The Origin of Chemical Elements**, 7:30 p.m. (B. Dean Lecture)

**6 FREE DAY**  
First Wednesday of each month

**13 AAMA: FROM NEPAL TO AMERICA**, 2 & 7:30 p.m. (Members Meeting)

**20 LASERIUM SHOWS**

**27 LASERIUM SHOWS**  
Thursday-Sunday, evenings, call 750-7138

**7 DOLPHIN FEEDINGS**  
are at 10:30 a.m., and 12:30, 2:30 and 4:30 p.m. every day

**14 ANCESTRAL PASSIONS: THE LEAKEY FAMILY**, 7:30 p.m. (Special Lectures)

**21 SCIENCE IN ACTION**

General programs Mon.-Fri. at 11:30 a.m. Children's programs Sat. at 12:30 & 3 p.m.; this month's topic is a celebration of Everglades.

**28**

**1 HIGHLIGHT TOURS**  
Free one-hour highlight tours are offered daily.

**8** Planetarium reopens with "Knock, Knock..." feature sky show

**22**

**23 SPECIAL EXHIBITS**  
"Dancing to the Fossil Record," through Jan. 8

**29**

**2 MEMBERS**  
Please bring your membership card when you visit the Academy

**9**



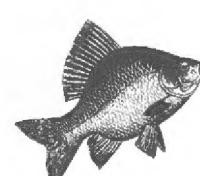
**16 MARITIME SONGS**, 1 p.m. (Traditional Arts)

**23 DANCE FROM THE CAUCASUS**, 1 p.m. (Traditional Arts)

**30 POLISH FOLK TALES**, 1 p.m. (Traditional Arts)

**OCTOBER DATES TO REMEMBER**

Oct. 31 - Dr. Ed Smith (B. Dean Lecture)



**UPCOMING MEMBERS MEETINGS**

Oct. 11 - Flora & Fauna of China, with Nancy Pickford  
Nov. 15 - Bears, with Matt Reid, director, The Great Bear Foundation  
Dec. 13 - Life in the Oceans, with Norbert Wu